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CHAPTER 49C — Two-Dimensional Arrays

Chapter Topics:

- Two-dimensional Arrays
- 2D Array Declaration
- Initializer Lists
- Different Numbers of cells in each row
- 2D Arrays as Arrays of 1D Arrays
- Printing a 2D Array

Often data comes naturally in a two dimensional form. Web browser screens are two dimensional, as are spreadsheets, printed pages, and images.

For many of these situations you need a *two-dimensional array*. This is a collection of cells laid out in a 2D grid, like graph paper. Each cell can hold a value (as with a 1D array). However, now *two* indexes are needed to specify a cell.

If you have ever used a *spreadsheet* then you have used a 2D grid for holding and manipulating data.

One programming problem in the 2014 Advanced Placement test for computer science required use of a two dimensional array of object references.

QUESTION 1:

(Thought question:) Do you suspect that 2D arrays in Java are objects?

